

**REMARKS**

**CLAIM REJECTIONS UNDER §103**

**US 5,498,355 (Perozzi) in view of US 5,254,272 (Walters)**

Claims 1 and 9-13 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over US 5,498,355 (Perozzi) in view of US 5,254,272 (Walters). For at least the following reasons, this rejection is respectfully traversed.

Claim 1 defines a gear oil composition comprising, *inter alia*, the following components: (B) a hydrocarbyl polysulfide with a sulfur activity of greater than about 125 mg in the Copper Corrosion Test, (C) a dihydrocarbyl dithiophosphate ester or salt, and (D) a dihydrocarbyl monothiophosphate amine salt.

As described on pages 3-4 of the Office Action response submitted on November 30, 2006, neither Perozzi, Walters, nor their combination teaches, discloses, or suggests the presently claimed gear oil composition. In particular, Perozzi describes a crankcase lubricating oil composition that includes a first succinic dispersant and second succinic dispersant. The crankcase composition is described as having enhanced performance results when metal-containing detergents are included (col. 2, lines 25-34). As optional components, amongst many choices, the Office Action points to the potential inclusion of a hydrocarbyl dithiophosphate salt (col. 9, line 41) and a dihydrocarbyl polysulfide (col. 16, line 28) of unspecified sulfur activity. The hydrocarbyl dithiophosphate is disclosed as typically containing metal. (col. 9, line 53 to col. 12, line 42). Further, nothing in Perozzi discloses the use of a dihydrocarbyl monothiophosphate, as a critical or optional component. For this, the Office Action points to Walters. Walters describes a metal-free hydraulic fluid that comprises a metal-free universal anti-wear additive and a corrosion inhibitor. The metal-free anti-wear agent is disclosed as possibly comprising a dihydrocarbyl thiophosphate.

Neither reference discloses a gear oil composition comprising the components claimed in claim 1. Further, one of ordinary skill in the art would not be motivated to combine Perozzi and Walters to arrive at the elements of claim 1 absent impermissible hindsight. There is no suggestion in Perozzi to seek additional components to enhance performance, and no suggestion to seek the specific component of a dihydrocarbyl mono thiophosphate amine salt.

Further, Perozzi teaches a crankcase composition and Walters teaches a hydraulic fluid. These fluids are used in different applications and are designed to meet different test specifications. Further, neither is a gear oil composition. Even further, nothing in either reference discloses or suggests that combining a crankcase composition with a hydraulic fluid would provide, or be suitable for, a gear oil composition.

For the sake of argument, even if one were to combine the crankcase composition of Perozzi with the hydraulic fluid of Walters, one would not arrive at the presently claimed gear oil composition. One reading Perozzi would learn of the benefits of including a metal-containing detergent as well as metal-containing dihydrocarbyl dithiophosphates. One reading Walters would learn of the benefits of having an entirely metal-free fluid. Thus, one would never be motivated to combine the components of the two references. For example, Perozzi explicitly teaches that metal detergents are preferably present in the composition for enhanced stability and wear inhibition. See Column 2, lines 32-34. In fact, every single example given in Table 1 of Perozzi in columns 21-23 contains at least one metal detergent including either or both of HiTEC<sup>®</sup> 7304 and 614 additives. These additives are disclosed in Column 21, lines 22-24, as low-base calcium alkylbenzene sulfonates (i.e., metal detergents).

In contrast to Perozzi, Walters describes a composition free from metal components. Therefore, there is a clear conflict between the teaching *for* metal detergents and metal-containing dihydrocarbyl dithiophosphates in Perozzi versus the teaching *against* metal-containing components in Walters, thereby removing any notion of a motivation to combine the two references.

Accordingly, Applicants assert that independent claim 1 is patentably distinct from the cited references, and all of the claims dependent upon claim 1 are likewise patentably distinct from the claimed references. It is further submitted that the obviousness rejection of claim 1 was maintained in error.

In the Office Action, the Examiner failed to consider all of the elements of the claims as written. None of the prior art of record discloses a gear oil composition having the aforementioned components. The Office Action states that the phrase “gear oil” is an intended use phrase and therefore not given patentable weight. However, according to MPEP 2111.02(II), “a preamble may provide context for claim construction, particularly where that preamble’s statement of intended use forms a basis for distinguishing the prior art in the patent’s prosecution history.” *Metabolite Labs., Inc. v. Corp. of Am. Holdings*, 370 F.3d 1354, 1358-62, 71 USPQ2d 1081, 1084-87 (Fed. Cir. 2004). Also, “[c]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention.” *Catalina Mktg. Int’l v. Coolsavings.com, Inc.*, 289 F.3d at 808-09, 62 USPQ2d at 1785. Applicants’ response of record, especially page 3 of the response submitted on November 30, 2006, clearly relies on the limitation of the claimed fluid being a “gear oil” to distinguish the claimed invention from the prior art of record, and therefore such limitation should be given patentable weight and full consideration. Accordingly, since the prior art of record fails to teach, suggest, or disclose all of the limitations of the present claims, an obviousness rejection can not properly be made.

Further, the Examiner’s position that “it is well known in the art to use a hydraulic fluid to lubricate a crankcase” is erroneous. It is actually well known in the art that hydraulic fluids and crankcase fluids are formulated using different ingredients to provide characteristic physical properties that render each type of fluid suitable for its particular and different function. A hydraulic fluid is a power transmitting fluid characterized by low compressibility, thermal and hydrolytic stability, and a low pour point, among other features. A crankcase oil is a lubricant

whose function is to provide a stable film between two contacting surfaces. A crankcase oil serves to lower the coefficient of friction, distribute the load evenly on the surfaces, cool down the parts, and remove foreign particles from the friction region. In order to accomplish these disparate functions, various additives are added to the fluids during formulation in amounts effective to provide finished fluids whose physical and chemical properties meet predefined standards of performance (i.e. for a hydraulic fluid or a crankcase fluid).

The Office Action states that in US Patent Application Publication 2003/0121341, a hydraulic fluid and a crankcase fluid are both used in a crankcase, and therefore the two fluids are interchangeable. However, on a closer reading of the reference, it is apparent that the two fluids are utilized in separate compartments of the crankcase and for different functions, and they are not intermixed or interchanged at any time. The hydraulic fluid is supplied between the front crankcase cover 24 and the valve body 90 (paragraph [0035]), while the crankcase fluid is supplied from oil passages in the front crankcase 25, the rear crankcase 26, and the rear crankcase cover 27 (paragraph [0040]). Hence, the hydraulic fluid is *outside* the crankcase cover, while the crankcase fluid is used *inside* the crankcase cover. Accordingly, the reference does *not* teach that the two fluids are interchangeable nor does the reference teach that particular additives of a hydraulic fluid or a crankcase fluid are blindly interchangeable, as is erroneously set forth in the Office Action.

Under this erroneous assumption, the rejections set forth in the Office Action attempt to establish motivation for making the combination of references. Applicants respectfully submit that the disclosure of US Patent Application Publication 2003/0121341 has instead established that one of skill in the art having common sense at the time the invention was made would *not* have reasonably looked to Walters to solve a problem already solved by Perozzi. Specifically, since the use of an antiwear agent was already specified by Perozzi, a person of skill in the art would have no reason to seek out the specific antiwear agent disclosed in Walters and required in the present claims, except from using Applicants' invention as a template through a hindsight reconstruction of Applicants' claims. Applicants submit, therefore, that it was an error to have

made the suggested combinations in the obviousness rejections, because there is simply no motivation to do so.

Thus, claim 1 is nonobvious over Perozzi in view of Walters. Reconsideration and allowance of claim 1 are respectfully requested.

Dependent claims 9-11 and 12 depend from independent claim 1, and contain additional important aspects of at least one embodiment of the invention. Therefore, dependent claims 9-11 and 12 are likewise nonobvious over Perozzi in view of Walters. Reconsideration and allowance of dependent claims 9-11 and 12 are respectfully requested.

Perozzi in view of Walters and US 4,282,153 (Minn)

Claim 5 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Perozzi in view of Walters and US 4,282,153 (Minn). For at least the following reasons, this rejection is respectfully traversed.

Dependent claim 5 depends from independent claim 1, and contains additional important aspects of at least one embodiment of the invention. Claim 1 is nonobvious over Perozzi in view of Walters. Minn does not make up for the deficiencies in these two references. Therefore, dependent claim 5 is nonobvious over Perozzi in view of Walters and Minn. Reconsideration and allowance of dependent claim 5 are respectfully requested.

Perozzi in view of Walters and US 6,133,207 (Milner)

Claim 7 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Perozzi in view of Walters and US 6,133,207 (Milner). For at least the following reasons, this rejection is respectfully traversed.

Dependent claim 7 depends from independent claim 1, and contains additional important aspects of at least one embodiment of the invention. Claim 1 is nonobvious over Perozzi in view of Walters. Milner does not make up for the deficiencies in these two references. Therefore,

dependent claim 7 is nonobvious over Perozzi in view of Walters and Milner. Reconsideration and allowance of dependent claim 7 are respectfully requested.

Perozzi in view of Walters and Walters (EP 0 744 456)

Claim 8 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Perozzi in view of Walters and EP 0 744 456 (Walters). For at least the following reasons, this rejection is respectfully traversed.

Walters EP '456 discloses and teaches a lubricant containing a metal-free sulfur-containing material of low sulfur activity – i.e., one that provides a copper weight loss of less than 65 mg in a copper corrosion test (See page 4, lines 20-35). Such disclosure and teaching is away from the presently claims. Therefore, not only are the disclosures and teachings of discussed above with respect to a combination of Perozzi and Walters not sufficient to make the present claims obvious, the combination with Walters EP '456 would likewise not lead one of skill in the art to the presently claimed combination. In fact, a combination with Walters EP '456 would lead one away from the present claims. Therefore, dependent claim 8 is nonobvious over Perozzi in view of Walters and Walters EP '456. Reconsideration and allowance of dependent claim 8 are respectfully requested.

**CONCLUSION AND FEES**

In light of the foregoing, Applicants urge the Examiner to reconsider the application, to withdraw the rejections, and to issue a notice of allowance at the earliest possible convenience.

As mentioned on page 1 of the present response, the outstanding Office Action mailed on June 15, 2007 was ambiguous as to whether the action was made final or non-final as both boxes 2a) and 2b) were marked on the Office Action Summary form. A call to the Examiner and her subsequent voicemail on July 11, 2007 clarified that the Office Action was intended to be non-final. The Applicant would again like to respectfully thank the Examiner for that clarification.

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In the event this response is not timely filed, Applicants hereby petition for the appropriate extension of time and request that the fee for the extension along with any other fees which may be due with respect to this paper be charged to our **Deposit Account No. 12-2355**.

Respectfully submitted,  
LUEDEKA, NEELY & GRAHAM, P.C.

By:

A handwritten signature in black ink, reading "Leah Oubre Robinson". The signature is fluid and cursive, with the first name "Leah" being the most prominent.

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